

Notice of Allowability

Application No.

09/757,764

Examiner

Michael J. Yigdall

Applicant(s)

SCALES, DANIEL J.

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the appeal brief filed on August 4, 2006.
2. ☒ The allowed claim(s) is/are 1-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

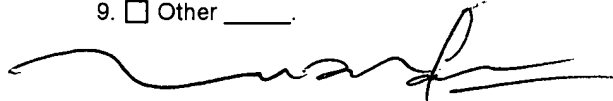
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



TUAN DAM
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

1. This Office action is responsive to the appeal brief filed on August 4, 2006. Claims 1-39 are pending.

Response to Arguments

2. Appellant's arguments (brief, pages 5-9) have been fully considered. Similar arguments were addressed in the final Office action mailed on April 11, 2006. Nonetheless, upon further consideration, it would not have been obvious to combine the references, as presented below in the examiner's statement of reasons for allowance. The rejections of claims 1-39 under 35 U.S.C. 103(a) have been withdrawn.

Allowable Subject Matter

3. Claims 1-39 are allowed.
4. The following is an examiner's statement of reasons for allowance.

The prior art of record does not teach or fairly suggest, in the manner and combination recited in each of independent claims 1, 13 and 25, moving a second memory operation to a new position in a graph representation of a procedure that is closer to a first memory operation, wherein the moving includes (1) removing one or more of the serial dependencies in an initial set of serial dependencies, and (2) creating a new serial dependency between the first memory operation and the second memory operation, as Appellant argues (brief, pages 5-9).

Moreno is directed to reordering memory operations (see, for example, column 1, lines 13-22). As presented in the final Office action, Moreno discloses moving a second memory

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operation to a new position that is closer to a first memory operation (see, for example, column 9, lines 55-67). Muthukumar then discloses removing a serial dependency and creating a new serial dependency in a graph representation of a procedure (see, for example, column 4, lines 37-44). However, in Muthukumar, the serial dependencies are modified to speculatively execute a compare operation (see, for example, column 4, lines 1-12) and any load operations that depend on the compare operation (see, for example, column 4, lines 21-23). While load operations are in fact memory operations, the serial dependency that is removed is between a loop control operation and a compare operation, and the new serial dependency that is created is between the loop control operation and a non-speculative operation that depends on the compare operation (see, for example, column 4, lines 37-44). Therefore, it would not have been obvious to combine Moreno and Muthukumar to teach or fairly suggest the claimed invention.

5. Any comments considered necessary by Appellant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (571) 272-3707. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

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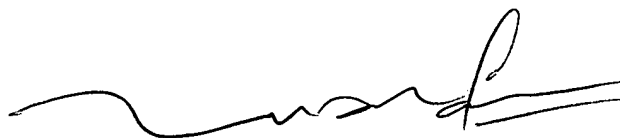
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Michael J. Yigdall
Examiner
Art Unit 2192

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